

**FINANCIAL ASSISTANCE  
FUNDING OPPORTUNITY ANNOUNCEMENT**



**U.S. Department of Energy  
Office of Hydrogen, Fuel Cells and Infrastructure Technologies**

**Renewable Hydrogen Production And  
HCNG Bus Demonstration**

**Funding Opportunity Number: DE-PS36-06GO96010**

**Announcement Type: Initial**

**CFDA Number: 81.087**

**Issue Date: 10/24/2005**

**Letter of Intent Due Date: Not Applicable**

**Pre-Application Due Date: Not Applicable**

**Application Due Date: 12/15/2005 at 6:00 PM Eastern Time**

**AMENDMENT NO. 001**

DATE: December 15, 2005

FROM: James P. Damm, Contracting Officer

TO: All Prospective Applicants

SUBJECT: Amendment No. 001 to Funding Opportunity Announcement No. DE-PS36-05GO96010, Renewable Hydrogen Production and HCNG Bus Demonstration

The Funding Opportunity Announcement is amended as follows:

1. The Application Due Date is changed from 12/15/05 at 6:00 PM Eastern Time to **01/05/06 at 6:00 PM Eastern Time.**
  - a. Part IV., Application and Submission Information, Section E., Submission Dates and Times, Sub-section 2. Application Due Date is changed to read:  
“Applications must be received by January 5, 2006, not later than 6:00 PM Eastern Time. You are encouraged to transmit your application well before the deadline. Applications received after the deadline will not be reviewed or considered for award.”
2. All other parts of the Funding Opportunity Announcement remain the same.

## **NOTE: NEW REQUIREMENTS FOR GRANTS.GOV**

### **Where to Submit**

Applications must be submitted through Grants.gov to be considered for award.

### **Registration Requirements**

There are several one-time actions you must complete in order to submit an application through Grants.gov (e.g., obtain a Dun and Bradstreet Data Universal Numbering System (DUNS) number, register with the Central Contract Registry (CCR), register with the credential provider, and register with Grants.gov). See <http://www.grants.gov/GetStarted>. Use the Grants.gov Organization Registration Checklist at <http://www.grants.gov/assets/OrganizationRegCheck.doc> to guide you through the process. Designating an E-Business Point of Contact (EBiz POC) and obtaining a special password called an MPIN are important steps in the CCR registration process. Applicants, who are not registered with CCR and Grants.gov, should allow at least 14 days to complete these requirements. It is suggested that the process be started as soon as possible.

### **Questions**

Questions relating to the registration process, system requirements, how an application form works, or the submittal process must be directed to Grants.gov at 1-800-518-4726 or [support@grants.gov](mailto:support@grants.gov). Part VII of this announcement explains how to submit other questions to the Department of Energy (DOE).

### **Application Receipt Notices**

After an application is submitted, the Authorized Organization Representative (AOR) will receive a series of four e-mails. It is extremely important that the AOR watch for and save each of the emails. It may take up to two (2) business days from application submission to receipt of email Number 2. You will know that your application has reached DOE when the AOR receives email Number 4. You will need the Submission Receipt Number (email Number 1) to track a submission. The titles of the four e-mails are:

Number 1 - Grants.gov Submission Receipt Number

Number 2 - Grants.gov Submission Validation Receipt for Application Number

Number 3 - Grants.gov Grantor Agency Retrieval Receipt for Application Number

Number 4 - Grants.gov Agency Tracking Number Assignment for Application Number

### **VERY IMPORTANT – Download PureEdge Viewer**

In order to download the application package, you will need to install PureEdge Viewer. This small, free program will allow you to access, complete, and submit applications electronically and securely. For a free version of the software, visit the following web site:

<http://www.grants.gov/DownloadViewer>.

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## **PART I – FUNDING OPPORTUNITY DESCRIPTION**

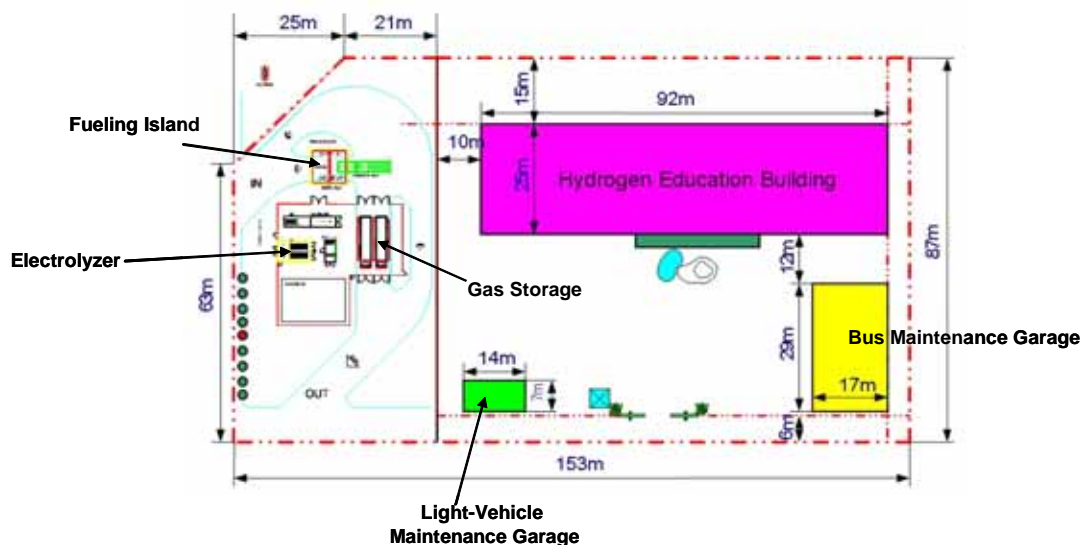
### **INTRODUCTION**

The Department of Energy's Golden Field Office is seeking proposals to design, install and commission a renewable hydrogen production facility, and to provide compressed hydrogen/natural gas bus engines for the Beijing Hydrogen Transportation Park.

### **BACKGROUND**

In 2004, the U.S. Department of Energy joined the Hydrogen Transportation Partnership Beijing 2008 ("Partnership"). The Partnership was formed to demonstrate hydrogen-based transportation technologies for the 2008 Olympic Games. The Partnership is a public/private collaborative organization that is working together to advance the research, development, and demonstration of fuel cell vehicles and hydrogen fueling infrastructure. In addition to the U.S. and Chinese governments, the Partnership includes international participants from the automotive, energy, and technology sectors. The participants are working together to build the Beijing Hydrogen Transportation Park.

Located in the Yongfeng Hi-tech Industrial Development Park in northwest Beijing, the Hydrogen Transportation Park will occupy 13,400 m<sup>2</sup>. Plans call for a refueling station with hydrogen production via electrolysis (using renewable and grid electricity) and steam methane reforming, hydrogen dispensing, hydrogen and hydrogen/natural gas blended fuel dispensing, garages and maintenance workshops, and a Hydrogen Education Center (see Figure 1 for draft Park layout). The Fleet Demonstration Route is designed to transport athletes and visitors to and from the Beijing Olympic Park, approximately 15 km to the southeast. The Park is managed and operated by SinoHytec. SinoHytec personnel will be responsible for the Park operations throughout the project.



**Figure 1: Planned Park Layout** – Project will integrate with the BP Hydrogen Fueling Station shown on the left. Renewable equipment may be integrated into the areas adjacent to the Education and Maintenance Buildings or into the buildings themselves (Note: Building construction is not part of this project).

## **OBJECTIVE**

The objective of the project is to provide the capability to generate hydrogen from renewable power, and hydrogen/natural gas blending and dispensing, to be integrated into the BP hydrogen fueling station being constructed at the Beijing Hydrogen Transportation Park, and to provide bus engines suitable for operation on blends of hydrogen and natural gas. Applicants selected under this solicitation will work in close collaboration with the Department of Energy and the other contributors to the Partnership to integrate the components into the Park infrastructure, and to ensure operability and maintenance of the systems through completion of the 2008 Beijing Olympics.

## **SCOPE**

This announcement calls for proposals for renewable hydrogen production equipment to be part of the overall Park fueling infrastructure and five hydrogen/natural gas engines to be installed in buses that will be used to transport athletes during the games. Proposals can be submitted under each subtopic; separate applications must be submitted for each.

### **Topic 1 – Renewable Hydrogen Production Equipment**

In this Task, applicants will design, install, and commission a renewable hydrogen production facility and a hydrogen/natural gas blending station. The renewable hydrogen production components and natural gas blending equipment will be integrated into the BP hydrogen fueling station located at the Hydrogen Park. Applicants should discuss their general approach for integration into the Park; however, designs are not expected to be finalized until post-award reviews conducted in close collaboration with BP and SinoHytec.

Onsite hydrogen compression/storage or sufficient production capacity to provide hydrogen to refuel five (5) HCNG buses, once daily, is required. Renewable electricity generation using local wind and/or solar resources will be included, as will power conditioning, as needed. 5-20 kg of hydrogen per day will be provided. Not all of the hydrogen is required to be derived from renewable resources, and the respondents should consider the use of grid power as part of the design. Two options for hydrogen generation are allowed:

- Applicants may elect to integrate with the existing grid-connected electrolyzer (250 kW alkaline unit equipped with a 200V/50Hz inverter) and its associated water purification and hydrogen storage systems.
- Applicants may elect to include a separate, dedicated electrolyzer, water purification and storage system of their own specifications.

The hydrogen will be blended with treated natural gas at the dispenser, with mixtures of 5% - 35% (by volume) hydrogen in natural gas to be tested in HCNG buses. Blending will need to be variable and changeable in an expedient manner by authorized personnel. Mixture settings will need to be visibly displayed on the dispenser. Natural gas cleanup and compression/storage subsystems will be required to meet bus engine specifications, including 200 bar onboard HCNG storage.

Installation and commissioning of the renewable hydrogen production project into the Beijing Hydrogen Park will include coordination with site owners and operators to permit renewable power generation equipment, natural gas clean-up system, and compressed gas storage systems. The following safety principles must be incorporated:

- **Facilities Design and Construction:** New facilities and modifications to existing facilities will be designed, procured, constructed and commissioned to enable safe, secure, healthy and environmentally sound performance throughout their operational life, by using recognized standards, procedures and management systems.
- **Operations and Maintenance:** Facilities will be operated and maintained within the current design envelope to ensure safe, secure, healthy and environmentally sound performance.
- **Management of Change:** All temporary and permanent changes to organization, personnel, systems, procedures, equipment, products, materials or substances will be evaluated and managed to ensure that health, safety and environmental (HSE) risks arising from these changes remain at an acceptable level. Changes to laws and regulations will be complied with and new scientific evidence relating to HSE effects will be taken into account.

Applicants will be responsible for training SinoHytec personnel in the operation of the equipment. Applicants must also ensure equipment remains operable during the project term through warranty of system components and system maintenance, as required.

**Renewable Resources:** Beijing is located at approximately 42 degrees latitude, and has low to moderate solar insolation, due to seasonal cloud cover and year-round scatter caused by significant particulate matter in the air. The wind resource is not well-characterized in the city, but is good to excellent on the mountain ridges, about 40 miles from the site. Preliminary solar insolation and wind data are included with this solicitation. The accuracy of these data has not been verified, and respondents should consider (but are not required to include) collecting site data or comparing the supplied data to other data sources.

**Utilities Connections:** China will provide grid power, city water and natural gas to the site. Electric power quality and reliability are not to western standards, and conditioning is likely to be required. It is expected that additional water purification and natural gas cleanup will also be required. The water will likely need to be treated to make it suitable as feedwater to an electrolyzer. The natural gas may have significant sulfur, water, and dust. Characteristics of two possible natural gas sources are provided in Table 1 below. The accuracy of the natural gas data has not been verified. Respondents should consider (but are not required to include) collecting power and water quality data and additional natural gas compositional data.

**Table 1 – Compositional data for two possible natural gas sources**

Composition (vol %)	Huabei Natural Gas	Shannxi Natural Gas
N <sub>2</sub>	0.5	
CH <sub>4</sub>	89.02	95.9494
CO <sub>2</sub>	1.54	3.0
C <sub>2</sub> H <sub>6</sub>	7.13	0.9075
C <sub>3</sub> H <sub>8</sub>	1.4	0.1367
iC <sub>4</sub> H <sub>10</sub>	0.14	
nC <sub>4</sub> H <sub>10</sub>	0.17	
iC <sub>5</sub> H <sub>12</sub>	0.06	
nC <sub>5</sub> H <sub>12</sub>	0.04	
H <sub>2</sub> S	0.0002	0.0002
H <sub>2</sub> O		0.0062
Higher Heating Value (MJ/m <sup>3</sup> )	42.48	39.0051



Lower Heating Value (MJ/m <sup>3</sup> )	38.40	35.1597
Density (kg/m <sup>3</sup> )	0.6278	0.7616
Dew Point		-13C (4.5MPa)

**Schedule:** It is anticipated that installation and testing of the hydrogen/natural gas blending station at the Beijing Hydrogen Transportation Park will need to take place no later than August 2006. Installation and testing of the renewable hydrogen generation components will need to take place no later than May 2007. Maintenance and operability of the system will need to be assured through December 2008.

**Other Considerations:** The goal of the Beijing Hydrogen Park is to demonstrate the safe use of clean, alternative energy. The renewable components should be featured and should be clearly visible to the Park visitors. Applicants may wish to consider educational aspects in their design.

### **Topic 2 – HCNG Bus Demonstration**

Under this topic, proposals are sought to provide five (5) compressed hydrogen/natural gas bus engines and to conduct the necessary fuel supply modifications needed for these engines to operate on compressed natural gas and hydrogen/natural gas blends. The buses, themselves, and the associated fuel storage systems will be provided separately and are not considered part of this project. The engine systems must be able to operate on hydrogen/natural gas blends up to 35% by volume hydrogen and meet the Euro IV emission requirements without loss in performance. The engine must be compatible for installation in a 1.56 m, BK6120N model, transit bus from Jing Hua Coach. The engines should have a power rating of approximately 170kW and a torque of approximately 650 N-m.

**Schedule:** It is anticipated that the buses will need to be operational no later than August 2006. Maintenance and operability of the bus engines will need to be assured through December 2008.

## **PART II – AWARD INFORMATION**

### **A. TYPE OF AWARD INSTRUMENT.**

- DOE anticipates awarding cooperative agreements under this program announcement. (See Section VI.B.2, Statement of Substantial Involvement)

### **B. ESTIMATED FUNDING.**

- Approximately \$ 1,300,000 is expected to be available for new awards under this announcement.

### **C. MAXIMUM AND MINIMUM AWARD SIZE.**

- Ceiling (i.e., the maximum amount of DOE funding for an individual award made under this announcement):  
Topic 1: \$ 1,000,000  
Topic 2: \$ 400,000
- Floor (i.e., the minimum amount for an individual award made under this announcement):  
None

### **D. EXPECTED NUMBER OF AWARDS.**

- Under this announcement, DOE expects to make the following number of awards for each Program /Topic Area:

<u>Program/Topic Area:</u>	<u>Number of Awards</u>
Renewable Hydrogen Production Equipment	1
HCNG Bus Demonstration	1

### **E. ANTICIPATED AWARD SIZE.**

- DOE anticipates that awards, including cost share, will be in the \$1,000,000 - \$2,000,000 range for Topic 1 and \$600,000-\$800,000 range for Topic 2, for the total project period.

### **F. PERIOD OF PERFORMANCE.**

- DOE anticipates making awards that will run for up to 4 years.

### **PART III - ELIGIBILITY INFORMATION**

#### **A. ELIGIBLE APPLICANTS.**

- All types of applicants are eligible to apply, except other Federal agencies, Federally Funded Research and Development Center (FFRDC) Contractors, and nonprofit organizations described in section 501(c)(4) of the Internal Revenue Code of 1986 that engaged in lobbying activities after December 31, 1995.

#### **B. COST SHARING**

- The cost share must be at least 50% of the total allowable costs for demonstration and commercial application projects (i.e., the sum of the Government share, including FFRDC contractor costs if applicable, and the recipient share of allowable costs equals the total allowable cost of the project) and must come from non-Federal sources. (See 10 CFR part 600 for the applicable cost sharing requirements.)

#### **C. OTHER ELIGIBILITY REQUIREMENTS.**

- **Federally Funded Research and Development Center (FFRDC) Contractors.**

FFRDC applicants are not eligible for an award under this announcement, but they may be proposed as a team member subject to the following guidelines:

Authorization for non-DOE/NNSA FFRDCs. The Federal agency sponsoring the FFRDC contractor must authorize in writing the use of the FFRDC contractor on the proposed project and this authorization must be submitted with the application. The use of a FFRDC contractor must be consistent with the contractor's authority under its award and must not place the FFRDC contractor in direct competition with the private sector.

Authorization for DOE/NNSA FFRDCs. The cognizant contracting officer for the FFRDC must authorize in writing the use of a DOE/NNSA FFRDC contractor on the proposed project and this authorization must be submitted with the application. The following wording is acceptable for this authorization.

“Authorization is granted for the \_\_\_\_\_ Laboratory to participate in the proposed project. The work proposed for the laboratory is consistent with or complimentary to the missions of the laboratory, will not adversely impact execution of the DOE/NNSA assigned programs at the laboratory, and will not place the laboratory in direct competition with the domestic private sector.”

Value/Funding. The value of, and funding for, the FFRDC contractor portion of the work will not normally be included in the award to a successful applicant. Usually, DOE/NNSA will fund a DOE/NNSA FFRDC contractor through the DOE field work proposal system and other FFRDC contractors through an interagency agreement with the sponsoring agency.

Cost Share. The applicant's cost share requirement will be based on the total cost of the project, including the applicant's and the FFRDC contractor's portions of the effort.

FFRDC Contractor Effort:

The scope of work to be performed by the FFRDC contractor may not be more significant than the scope of work to be performed by the applicant.

- The FFRDC contractor effort, in aggregate, shall not exceed 20% of the total estimated cost of the project, including the applicant's and the FFRDC contractor's portions of the effort.

Responsibility. The applicant, if successful, will be the responsible authority regarding the settlement and satisfaction of all contractual and administrative issues, including but not limited to, disputes and claims arising out of any agreement between the applicant and the FFRDC contractor.

## PART IV – APPLICATION AND SUBMISSION INFORMATION

### A. ADDRESS TO REQUEST APPLICATION PACKAGE.

Application forms and instructions are available at Grants.gov. To access these materials, go to <http://www.grants.gov>, select “Apply for Grants,” and then select “Download Application Package.” Enter the CFDA and/or the funding opportunity number located on the cover of this announcement and then follow the prompts to download the application package. **NOTE:** You will not be able to download the Application Package unless you have installed PureEdge Viewer (See: <http://www.grants.gov/DownloadViewer>).

### B. LETTER OF INTENT AND PRE-APPLICATION.

#### 1. Letter of Intent.

- Letters of Intent are not required.

#### 2. Pre-application.

- Pre-applications are not required.

### C. CONTENT AND FORM OF APPLICATION – SF 424

You must complete the mandatory forms and any applicable optional forms (e.g., SF-LLL-Disclosure of Lobbying Activities) in accordance with the instructions on the forms and the additional instructions below. **Files that are attached to the forms must be in Adobe Portable Document Format (PDF) unless otherwise specified in this announcement.**

#### 1. SF 424 - Application for Federal Assistance.

Complete this form first to populate data in other forms. Complete all required fields in accordance with the pop-up instructions on the form. To activate the instructions, turn on the “Help Mode” (Icon with the pointer and question mark at the top of the form).

#### 2. Other Attachments Form

Submit the following files with your application and attach them to the Other Attachments Form. Click on “Add Mandatory Other Attachment” to attach the Project Narrative. Click on “Add Optional Other Attachment,” to attach the other files.

##### **Project Narrative File - Mandatory Other Attachment**

The project narrative must not exceed 10 pages, including charts, graphs, maps, photographs, and other pictorial presentations, when printed using standard 8.5” by 11” paper with 1 inch margins (top, bottom, left, and right). EVALUATORS WILL REVIEW ONLY THE NUMBER OF PAGES SPECIFIED IN THE PRECEDING SENTENCE. The font must not be smaller than 11 point. Do not include any Internet addresses (URLs) that provide information necessary to review the application. See Part VIII.D for instructions on how to mark proprietary application information. Save the information in a single file named “Project.pdf,” and click on “Add Mandatory Other Attachment” to attach.

The project narrative must include:

- **Project Objectives.** This section should provide a clear, concise statement of the specific objectives/aims of the proposed project.
- **Merit Review Criterion Discussion.** The section should be formatted to address each of the merit review criterion and sub-criterion listed in Section V. A. Provide sufficient information so that reviewers will be able to evaluate the application in accordance with these merit review criteria. **DOE WILL EVALUATE AND CONSIDER ONLY THOSE APPLICATIONS THAT ADDRESS SEPARATELY EACH OF THE MERIT REVIEW CRITERION AND SUB-CRITERION.**
- **Project Timetable:** This section should outline as a function of time, year by year, all the important activities or phases of the project, including any activities planned beyond the project period. Successful applicants must use this project timetable to report progress.
- **Evaluation Phase:** This section must include a plan and metrics to be used to assess the success of the project.

#### **Project Summary/Abstract File**

The project summary/abstract must contain a summary of the proposed activity suitable for dissemination to the publication. It should be a self-contained document that identifies the name of the applicant, the project director/principal investigator(s), the project title, the objectives of the project, a description of the project, including methods to be employed, the potential impact of the project (i.e., benefits, outcomes), and major participants (for collaborative projects). This document must not include any proprietary or sensitive business information as the Department may make it available to the public. The project summary must not exceed 1 page when printed using standard 8.5" by 11" paper with 1" margins (top, bottom, left and right) with font not smaller than 11 point. Save this information in a file named "Summary.pdf," and click on "Add Optional Other Attachment" to attach.

#### **Budget Information – Non-Construction Programs File (SF-424 A Excel)**

You must provide a separate budget for each year of support requested and a cumulative budget for the total project period. Use the SF 424 A Excel, "Budget Information – Non Construction Programs" form on the Applicant and Recipient Page at <http://grants.pr.doe.gov>. You may request funds under any of the Object Class Categories as long as the item and amount are necessary to perform the proposed work, meet all the criteria for allowability under the applicable Federal cost principles, and are not prohibited by the funding restrictions in this announcement (See PART IV, G). Save the information in a single file named "SF424A.xls," and click on "Add Optional Other Attachment" to attach.

#### **Budget Justification File**

You must justify the costs proposed in each Object Class Category/Cost Classification category (e.g., identify key persons and personnel categories and the estimated costs for each person or category; provide a list of equipment and cost of each item; identify proposed subaward/consultant work and cost of each subaward/consultant; describe purpose of proposed travel, number of travelers and number of travel days; list general categories of supplies and amount for each category; and provide any other information

you wish to support your budget). Provide the name of your cognizant/oversight agency, if you have one, and the name and phone number of the individual at your organization who is responsible for negotiating your indirect rates. If cost sharing is required, provide an explanation of the source, nature, amount and availability of any proposed cost sharing. Save this information in a single file named "Budget.pdf," and click on "Add Optional Other Attachment" to attach.

### **Subaward Budget File(s)**

You must provide a separate budget (i.e., budget for each budget year and a cumulative budget) for each subawardee that is expected to perform work estimated to be more than \$100,000 or 50 percent of the total work effort (which ever is less). Use the SF 424 A Excel for Non Construction Programs or the SF 424 C Excel for Construction Programs. These forms are found on the Applicant and Recipient Page at <http://grants.pr.doe.gov>. Save each Subaward budget in a separate file. Use up to 10 letters of the subawardee's name (plus .xls) as the file name (e.g., ucla.xls or energyres.xls), and click on "Add Optional Other Attachment" to attach.

### **Certifications/Assurances for Use with SF 424 File**

You must complete and provide the "Certifications and Assurances for Use with SF 424" form on the Applicant and Recipient Page at <http://grants.pr.doe.gov>. Submission of an electronic application through Grants.gov constitutes the submission of a signed document. Type the name of the person responsible for providing the certifications and assurances in the signature block and save as a pdf file. Do not submit a scanned copy of the form. Name the file "Certs.pdf," and click on "Add Optional Other Attachment" to attach.

### **Commitment Letters from Third Parties Contributing to Cost Sharing**

If a third party, (i.e., a party other than the organization submitting the application) proposes to provide all or part of the required cost sharing, the applicant must include a letter from the third party stating that it is committed to providing a specific minimum dollar amount of cost sharing. The letter should also identify the proposed cost sharing (e.g., cash, services, and/or property) to be contributed. Letters must be signed by the person authorized to commit the expenditure of funds by the entity. Provide this information in a single file named "CLTP.pdf" and click on "Add Optional Other Attachment" to attach.

### **Biographical Sketch File**

Provide a biographical sketch for each key person proposed, including subawardees and consultants if they meet the definition of key person. A key person is any individual who contributes in a substantive, measurable way to the execution of the project. Save all biographical sketches in a single file named "Bio.pdf" and click on "Add Optional Other Attachment" to attach. The biographical information for each person must not exceed 2 pages when printed on 8.5" by 11" paper with 1 inch margins (top, bottom, left, and right) with font not smaller than 11 point and must include:

**Education and Training.** Undergraduate, graduate and postdoctoral training, provide institution, major/area, degree and year.

**Professional Experience:** Beginning with the current position list, in chronological order, professional/academic positions with a brief description.

**Publications.** Provide a list of up to 10 publications most closely related to the proposed project. For each publication, identify the names of all authors (in the same sequence in which they appear in the publication), the article title, book or journal title, volume number, page numbers, year of publication, and website address if available electronically.

Patents, copyrights and software systems developed may be provided in addition to or substituted for publications.

**Synergistic Activities.** List no more than 5 professional and scholarly activities related to the effort proposed.

**Budget for DOE Federally Funded Research and Development Center (FFRDC) Contractor, if applicable**

If a DOE FFRDC contractor is to perform a portion of the work, you must provide a DOE Field Work Proposal in accordance with the requirements in DOE Order 412.1 Work Authorization System. This order and the DOE Field Work Proposal form are available at <http://grants.pr.doe.gov>. Use up to 10 letters of the FFRDC name (plus .pdf) as the file name (e.g., lanl.pdf or anl.pdf), and click on "Add Attachments" in Field 11 to attach.

**3. Disclosure of Lobbying Activities (SF-LLL)**

If applicable, complete SF- LLL. Applicability: If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the grant/cooperative agreement, you must complete and submit Standard Form - LLL, "Disclosure Form to Report Lobbying."



### Summary of Required Forms/Files

Your application must include the following documents:

<b>Name of Document</b>	<b>Format</b>	<b>File Name</b>
Application for Federal Assistance – SF424	PureEdge Form	N/A
Other Attachments Form: Attach the following files to this form:	PureEdge Form	N/A
Project Narrative File	PDF	Project.pdf
Project Summary/Abstract File	PDF	Summary.pdf
SF 424A File - Budget Information for Non-Construction Programs	Excel	SF424A.xls
Budget Justification File	Excel	Budget.pdf
Subaward Budget File(s), if applicable	Excel	See Instructions
Certifications/Assurances File	PDF	Certs.pdf
Commitment Letters from Third Parties Contributing to Cost Sharing File, if applicable.	PDF	CLTP.pdf
Biographical Sketch File	PDF	Bio.pdf
Budget for FFRDC Contractor, if applicable	PDF	Name.pdf
SF-LLL Disclosure of Lobbying Activities, if applicable.	PureEdge Form	N/A

#### **D. SUBMISSIONS FROM SUCCESSFUL APPLICANTS.**

- Successful applicants must submit the information listed below not later than 30 calendars days after notification of selection. Applicants who fail to provide the information within the required time period may be eliminated from further consideration.

What to submit	Required Form or Format
<p><b>Designated Responsible Employee for complying with national policies prohibiting discrimination.</b></p> <p>Provide organization name, project title, DOE application tracking number and the name, title, and phone number of Designated Responsible Employee for complying with national policies prohibiting discrimination (See 10 CFR 1040.5).</p>	<p>No special format.</p> <p>E-mail information to:  <a href="mailto:beijing@go.doe.gov">beijing@go.doe.gov</a></p>

## E. SUBMISSION DATES AND TIMES.

- 1. Pre-application Due Date.** Pre-applications are not required.
- 2. Application Due Date.**  
Applications must be received by December 15, 2005, not later than 6:00 PM Eastern Time. You are encouraged to transmit your application well before the deadline.  
APPLICATIONS RECEIVED AFTER THE DEADLINE WILL NOT BE REVIEWED OR CONSIDERED FOR AWARD.

## F. INTERGOVERNMENTAL REVIEW

- This program is not subject to Executive Order 12372 – Intergovernmental Review of Federal Programs.

## G. FUNDING RESTRICTIONS.

Cost Principles. Costs must be allowable in accordance with the applicable Federal cost principles referenced in 10 CFR part 600.

Pre-award Costs. Recipients may charge to an award resulting from this announcement pre-award costs that were incurred within the ninety (90) calendar day period immediately preceding the effective date of the award, if the costs are allowable in accordance with the applicable Federal cost principles referenced in 10 CFR part 600. Recipients must obtain the prior approval of the contracting officer for any pre-award costs that are for periods greater than this 90 day calendar period.

Pre-award costs are incurred at the applicant's risk. DOE is under no obligation to reimburse such costs if for any reason the applicant does not receive an award or if the award is made for a lesser amount than the applicant expected.

## H. OTHER SUBMISSION AND REGISTRATION REQUIREMENTS

- 1. Where to Submit.**

**APPLICATIONS MUST BE SUBMITTED THROUGH GRANTS.GOV TO BE**

**CONSIDERED FOR AWARD.** Submit electronic applications through the “Apply for Grants” function at [www.Grants.gov](http://www.Grants.gov). If you have problems completing the registration process or submitting your application, call Grants.gov at 1-800-518-4726 or send an email to [support@grants.gov](mailto:support@grants.gov).

#### **4. Registration Process.**

You must COMPLETE the one-time registration process (all steps) before you can submit your first application through Grants.gov (See [www.grants.gov/GetStarted](http://www.grants.gov/GetStarted)). **We recommend that you start this process at least two weeks before the application due date.** It may take 14 days or more to complete the entire process. Use the Grants.gov Organizational Registration Checklists at <http://www.grants.gov/assets/OrganizationRegCheck.doc> to guide you through the process. **IMPORTANT:** During the CCR registration process, you will be asked to designate an E-Business Point of Contact (EBIZ POC). The EBIZ POC must obtain a special password called “Marketing Partner identification Number” (MPIN).

## **PART V - APPLICATION REVIEW INFORMATION**

### **A. CRITERIA**

#### **1. Initial Review Criteria.**

- Prior to a comprehensive merit evaluation, DOE will perform an initial review to determine that (1) the applicant is eligible for an award; (2) the information required by the announcement has been submitted; (3) all mandatory requirements are satisfied; and (4) the proposed project is responsive to the objectives of the funding opportunity announcement.

#### **2. Merit Review Criteria.**

The following criteria will be used to evaluate Applications

##### **Criterion 1: Project Description and Implementation Plan                      Weight: [40%]**

- Perceived value of the project in advancing hydrogen technologies and in enhancing public confidence and acceptability of hydrogen energy systems.
- Extent to which the major technical and resource issues, and risk areas related to the proposed approach are identified and discussed, with viable plans for resolution.
- Level of technical understanding of integrating hydrogen system components and designing systems for real-world application.
- Demonstrated degree of understanding of regional resources and technology viability.
- Understanding of regulatory requirements and issues that will impact the project.
- Soundness of the discussion regarding integration of the systems into the Beijing Hydrogen Park and extent to which issues related to the overall hydrogen safety envelope of the Park are addressed.
- Likelihood of overall technical success.

##### **Criterion 2: Work Plan/Statement of Objectives                                      Weight: [30%]**

- Adequacy and completeness of the statement of objectives.
- Clarity and completeness of the description of each activity/task necessary to complete the project.
- Likelihood the work plan will lead to achieving the primary objective of the announcement:
  - Topic 1 - Install and commission a hydrogen production facility to provide 5-20 kg of hydrogen per day by electrolysis and that includes (1) hydrogen generated from renewable resources; (2) onsite hydrogen compression and storage, or sufficient production capacity, to provide hydrogen to refuel five HCNG buses, once daily each; (3) natural gas treatment as required to meet bus engine specifications; and (4) hydrogen/natural gas compressor/dispenser, sufficient to deliver HCNG to the 200 bar onboard storage system and with capability to vary hydrogen content between 5% and 35%.

- Topic 2 – Provide five compressed natural gas bus engine systems able to operate on hydrogen/natural gas blends (up to 35% by volume hydrogen) and meet the Euro IV emission requirements without loss in performance.
- Degree to which respondent addresses accuracy of hydrogen and natural gas blending, delivery and use.
- Topic 1 Only – Extent to which hydrogen is derived from renewable resources.
- Appropriateness of work breakdown structure, and performance cost and schedule, including milestones and decision points.

**Criterion 3: Roles, Responsibilities, and Capabilities**

**Weight: [30%]**

- Soundness of the project management concept with respect to proposed tasks and organizational structure to achieve project objectives
- Capabilities of the Applicant and Participants to comprehensively address all aspects of the proposed project
- Level of participation by project Participants as evidenced by letter(s) of commitment
- Adequacy of resources to accommodate the proposed project
- Applicability of the qualifications and experience of key personnel
- Degree to which respondent addresses maintenance and continued operability of the equipment through end of project period.

**3. Other Selection Factors.**

The selection official will consider the following program policy factors in the selection process:

1. Past Performance
2. Technological diversity of projects
3. Cost share above minimum requirement

**B. REVIEW AND SELECTION PROCESS.**

**1. Merit Review.**

- Applications that pass the initial review will be subjected to a merit review in accordance with the guidance provided in the "Department of Energy Merit Review Guide for Financial Assistance and Unsolicited Proposals." This guide is available under Financial Assistance, Regulations and Guidance at <http://professionals.pr.doe.gov/ma5/ma-5web.nsf/?Open>.

**2. Selection.**

- The Selection Official will consider the merit review recommendation, program policy factors, and the amount of funds available.
- DOE reserves the right to conduct an independent third party financial capability review for applicants selected for negotiation of an award (including, for small businesses, personal credit information of the principal(s) if there is insufficient information to determine financial capability of the applicant).

**3. Discussions and Award.**

- The Government may enter into discussions with a selected applicant for any reason deemed necessary, including but not limited to: (1) the budget is not appropriate or reasonable for the requirement; (2) only a portion of the application is selected for award; (3) the Government needs additional information to determine that the recipient is capable of complying with the requirements in 10 CFR part 600; and/or (4) special terms and conditions are required. Failure to resolve satisfactorily the issues identified by the Government will preclude award to the applicant.

**C. ANTICIPATED NOTICE OF SELECTION AND AWARD DATES.**

- DOE anticipates notifying applicants selected for award by January 31, 2006, and making awards by February 28, 2006.

## **PART VI - AWARD ADMINISTRATION INFORMATION**

### **A. AWARD NOTICES.**

#### **1. Notice of Selection.**

- DOE will notify applicants selected for award. This notice of selection is not an authorization to begin performance. (See Part IV.G with respect to the allowability of pre-award costs.)

Organizations whose applications have not been selected will be advised as promptly as possible. This notice will explain why the application was not selected.

#### **2. Notice of Award.**

- A Notice of Financial Assistance Award issued by the contracting officer is the authorizing award document. It normally includes, either as an attachment or by reference: 1. Special Terms and Conditions; 2. Applicable program regulations, if any; 3. Application as approved by DOE.; 4. DOE assistance regulations at 10 CFR part 600, or, for Federal Demonstration Partnership (FDP) institutions, the FDP terms and conditions; 5. National Policy Assurances To Be Incorporated As Award Terms; 6. Budget Summary; and 7. Federal Assistance Reporting Checklist, which identifies the reporting requirements.

### **B. ADMINISTRATIVE AND NATIONAL POLICY REQUIREMENTS.**

#### **1. Administrative Requirements.**

The administrative requirements for DOE grants and cooperative agreements are contained in 10 CFR part 600 (See: <http://ecfr.gpoaccess.gov>), except for grants made to Federal Demonstration Partnership (FDP) institutions. The FDP terms and conditions and DOE FDP agency specific terms and conditions are located on the National Science Foundation web site at [http://www.nsf.gov/awards/managing/fed\\_dem\\_part.jsp](http://www.nsf.gov/awards/managing/fed_dem_part.jsp).

#### **2. Special Terms and Conditions and National Policy Requirements.**

##### **Special Terms and Conditions and National Policy Requirements.**

The DOE Special Terms and Conditions for Use in Most Grants and Cooperative Agreements are located at <http://grants.pr.doe.gov>. The National Policy Assurances To Be Incorporated As Award Terms are located at <http://grants.pr.doe.gov>.

##### **Intellectual Property Provisions.**

The standard DOE financial assistance intellectual property provisions applicable to the various types of recipients are located at [http://www.gc.doe.gov/techtrans/sipp\\_matrix.html](http://www.gc.doe.gov/techtrans/sipp_matrix.html).

##### **Statement of Substantial Involvement.**

DOE will be actively involved in the review of all project plans and facility designs. DOE will serve as a liaison between the recipient, BP, SinoHytec, the Chinese Ministry of Science and Technology, the Beijing Municipal People's Government, and Tsinghua

University, for any integration, coordination or permitting issues.

### **C. REPORTING.**

Reporting requirements are identified on the Federal Assistance Reporting Checklist, DOE F 4600.2, attached to the award agreement. See <http://www.go.doe.gov/PDFs/4600-2.pdf> for the proposed Checklist for this program.

## **PART VII - QUESTIONS/AGENCY CONTACTS**

### **A. QUESTIONS**

Questions regarding the content of the announcement must be submitted through the "Submit Question" feature of the DOE Industry Interactive Procurement System (IIPS) at <http://e-center.doe.gov>. Locate the program announcement on IIPS and then click on the "Submit Question" button. Enter required information. You will receive an electronic notification that your question has been answered. DOE/NNSA will try to respond to a question within 3 business days, unless a similar question and answer have already been posted on the website.

Questions relating to the registration process, system requirements, how an application form works, or the submittal process must be directed to Grants.gov at 1-800-518-4726 or [support@grants.gov](mailto:support@grants.gov). DOE/NNSA cannot answer these questions.

### **B. AGENCY CONTACT**

Name: Genevieve Wozniak  
E-mail: [beijing@go.doe.gov](mailto:beijing@go.doe.gov)  
FAX: 303-275-4754  
Telephone: 303-275-4942



## **PART VIII - OTHER INFORMATION**

### **A. MODIFICATIONS.**

Notices of any modifications to this announcement will be posted on Grants.gov and the DOE Industry Interactive Procurement System (IIPS). You can receive an email when a modification or an announcement message is posted by joining the mailing list for this announcement through the link in IIPS. When you download the application at Grants.gov, you can also register to receive notifications of changes through Grants.gov.

### **B. GOVERNMENT RIGHT TO REJECT OR NEGOTIATE.**

DOE reserves the right, without qualification, to reject any or all applications received in response to this announcement and to select any application, in whole or in part, as a basis for negotiation and/or award.

### **C. COMMITMENT OF PUBLIC FUNDS.**

The Contracting Officer is the only individual who can make awards or commit the Government to the expenditure of public funds. A commitment by other than the Contracting Officer, either explicit or implied, is invalid.

### **D. PROPRIETARY APPLICATION INFORMATION.**

Patentable ideas, trade secrets, proprietary or confidential commercial or financial information, disclosure of which may harm the applicant, should be included in an application only when such information is necessary to convey an understanding of the proposed project. The use and disclosure of such data may be restricted, provided the applicant includes the following legend on the first page of the project narrative and specifies the pages of the application which are to be restricted:

“The data contained in pages \_\_\_\_\_ of this application have been submitted in confidence and contain trade secrets or proprietary information, and such data shall be used or disclosed only for evaluation purposes, provided that if this applicant receives an award as a result of or in connection with the submission of this application, DOE shall have the right to use or disclose the data herein to the extent provided in the award. This restriction does not limit the government’s right to use or disclose data obtained without restriction from any source, including the applicant.”

To protect such data, each line or paragraph on the pages containing such data must be specifically identified and marked with a legend similar to the following:

“The following contains proprietary information that (name of applicant) requests not be released to persons outside the Government, except for purposes of review and evaluation.”

### **E. EVALUATION AND ADMINISTRATION BY NON-FEDERAL PERSONNEL.**

In conducting the merit review evaluation, the Government may seek the advice of qualified non-Federal personnel as reviewers. The Government may also use non-Federal personnel to conduct routine, nondiscretionary administrative activities. The applicant, by submitting its application, consents to the use of non-Federal reviewers/administrators. Non-Federal reviewers must sign conflict of interest and non-disclosure agreements prior to reviewing an application. Non-Federal personnel conducting administrative activities must sign a non-disclosure agreement.

## **F. INTELLECTUAL PROPERTY DEVELOPED UNDER THIS PROGRAM.**

Patent Rights. The government will have certain statutory rights in an invention that is conceived or first actually reduced to practice under a DOE award. 42 U.S.C. 5908 provides that title to such inventions vests in the United States, except where 35 U.S.C. 202 provides otherwise for nonprofit organizations or small business firms. However, the Secretary of Energy may waive all or any part of the rights of the United States subject to certain conditions. (See “Notice of Right to Request Patent Waiver” in paragraph G below.)

Rights in Technical Data. Normally, the government has unlimited rights in technical data created under a DOE agreement. Delivery or third party licensing of proprietary software or data developed solely at private expense will not normally be required except as specifically negotiated in a particular agreement to satisfy DOE's own needs or to insure the commercialization of technology developed under a DOE agreement.

Special Protected Data Statutes. This program is covered by a special protected data statute. The provisions of the statute provide for the protection from public disclosure, for a period of up to 5 years from the development of the information, of data that would be trade secret, or commercial or financial information that is privileged or confidential, if the information had been obtained from a non-Federal party. Generally, the provision entitled, Rights in Data – Programs Covered Under Special Protected Data Statutes, (10 CFR 600 Appendix A to Subpart D), would apply to an award made under this announcement. This provision will identify data or categories of data first produced in the performance of the award that will be made available to the public, notwithstanding the statutory authority to withhold data from public dissemination, and will also identify data that will be recognized by the parties as protected data.

## **G. NOTICE OF RIGHT TO REQUEST PATENT WAIVER.**

Applicants may request a waiver of all or any part of the rights of the United States in inventions conceived or first actually reduced to practice in performance of an agreement as a result of this announcement, in advance of or within 30 days after the effective date of the award. Even if such advance waiver is not requested or the request is denied, the recipient will have a continuing right under the award to request a waiver of the rights of the United States in identified inventions, i.e., individual inventions conceived or first actually reduced to practice in performance of the award. Any patent waiver that may be granted is subject to certain terms and conditions in 10 CFR 784.

Domestic small businesses and domestic nonprofit organizations will receive the patent rights clause at 37 CFR 401.14, i.e., the implementation of the Bayh-Dole Act. This clause permits domestic small business and domestic nonprofit organizations to retain title to subject inventions. Therefore, small businesses and nonprofit organizations do not need to request a waiver.

## **H. NOTICE REGARDING ELIGIBLE/INELIGIBLE ACTIVITIES.**

Eligible activities under this program include those which describe and promote the understanding of scientific and technical aspects of specific energy technologies, but not

those which encourage or support political activities such as the collection and dissemination of information related to potential, planned or pending legislation.

## APPENDIX A – DEFINITIONS

**“Amendment”** means a revision to a solicitation.

**"Applicant"** means the legal entity or individual signing the Application. This entity or individual may be one organization or a single entity representing a group of organizations (such as a Consortium) that has chosen to submit a single Application in response to a solicitation.

**"Application"** means the documentation submitted in response to a solicitation. NOTE: Application is referred to as Proposal in IIPS.

**“Authorized Organization Representative (AOR)”** is the person with assigned privileges who is authorized to submit grant applications through Grants.gov on behalf of an organization. The privileges are assigned by the organization's E-Business Point of Contact designated in the CCR.

**"Award"** means the written documentation executed by a DOE Contracting Officer, after an Applicant is selected, which contains the negotiated terms and conditions for providing Financial Assistance to the Applicant. A Financial Assistance Award may be either a Grant or a Cooperative Agreement.

**"Budget"** means the cost expenditure plan submitted in the Application, including both the DOE contribution and the Applicant Cost Share.

**"Consortium (plural consortia)"** means the group of organizations or individuals that have chosen to submit a single Application in response to a solicitation.

**"Contracting Officer"** means the DOE official authorized to execute Awards on behalf of DOE and who is responsible for the business management and non-program aspects of the Financial Assistance process.

**"Cooperative Agreement"** means a Financial Assistance instrument used by DOE to transfer money or property when the principal purpose of the transaction is to accomplish a public purpose of support or stimulation authorized by Federal statute, and Substantial Involvement (see definition below) is anticipated between DOE and the Applicant during the performance of the contemplated activity.

**"Cost Sharing"** means the respective share of Total Project Costs to be contributed by the Applicant and by DOE. The percentage of Applicant Cost Share is to be applied to the Total Project Cost (i.e., the sum of Applicant plus DOE Cost Shares) rather than to the DOE contribution alone.

**“Central Contractor Registry (CCR)”** is the primary database which collects, validates, stores and disseminates data in support of agency missions. Funding Opportunity Announcements which require application submission through Grants.gov require that the organization first be registered in the CCR at <http://www.grants.gov/CCRRegister>.

**“Credential Provider”** is an organization that validates the electronic identity of an individual through electronic credentials, PINS, and passwords for Grants.gov. Funding Opportunity Announcements which require application submission through Grants.gov require that the

individual applying on behalf of an organization first be registered with the Credential Provider at <http://www.grants.gov/CredentialProvider>.

**“Data Universal Numbering System (DUNS) Number”** is a unique nine-character identification number issued by Dun and Bradstreet (D&B). Organizations must have a DUNS number prior to registering in the CCR. Call 1-866-705-5711 to receive one free of charge. <http://www.grants.gov/RequestaDUNS>

**“E-Business Point of Contact (POC)”** is the individual who is designated as the Electronic Business Point of Contact in the CCR registration. This person is the sole authority of the organization with the capability of designating or revoking an individual’s ability to submit grant applications on behalf of their organization through Grants.gov. <http://www.grants.gov/assets/EBIZRegCheck.doc>

**“E-Find”** is a Grants.gov webpage where you can search for Federal Funding Opportunities in FedGrants. <http://www.grants.gov/FindGrantOpportunities?search=basic>

**“Fedgrants.gov”** is the official website where you can locate Federal Funding Opportunities <http://fedgrants.gov/Applicants/index.html>.

**“Financial Assistance”** means the transfer of money or property to an Applicant or Participant to accomplish a public purpose of support authorized by Federal statute through Grants or Cooperative Agreements and sub-awards. For DOE, it does not include direct loans, loan guarantees, price guarantees, purchase agreements, Cooperative Research and Development Agreements (CRADAs), or any other type of financial incentive instrument.

**“Federally Funded Research and Development Center (FFRDC)”** means a research laboratory as defined by Federal Acquisition Regulation 35.017.

**“Funding Opportunity Announcement (FOA)”** is a publicly available document by which a Federal agency makes known its intentions to award discretionary grants or cooperative agreements, usually as a result of competition for funds. Funding opportunity announcements may be known as program announcements, notices of funding availability, solicitations, or other names depending on the agency and type of program.

**“Grant”** means a Financial Assistance instrument used by DOE to transfer money or property when the principal purpose of the transaction is to accomplish a public purpose of support or stimulation authorized by Federal statute, and no Substantial Involvement is anticipated between DOE and the Applicant during the performance of the contemplated activity.

**“Grants.gov”** is the “storefront” web portal which allows organizations to electronically find and apply for competitive grant opportunities from all Federal grant-making agencies. Grants.gov is THE single access point for over 900 grant programs offered by the 26 Federal grant-making agencies. <http://www.grants.gov>

**“Industry Interactive Procurement System (IIPS)”** is DOE’s Internet-based procurement system which allows access to DOE’s business opportunities database, allows user registration and submittal of Applications: <http://e-center.doe.gov/>.

**“Key Personnel”** means the individuals who will have significant roles in planning and implementing the proposed Project on the part of the Applicant and Participants, including FFRDCs.

**“Marketing Partner Identification Number (MPIN)”** is a very important password designated by your organization when registering in CCR. The E-Business Point of Contact will need the MPIN to login to Grants.gov to assign privileges to the individual(s) authorized to submit applications on behalf of your organization. The MPIN must have 9 digits containing at least one alpha character (must be in capital letters) and one number (no spaces or special characters permitted).

**"Participant"** for purposes of this Solicitation only, means any entity, except the Applicant substantially involved in a Consortium, or other business arrangement (including all parties to the Application at any tier), responding to the Solicitation.

**"Project"** means the set of activities described in an Application, State plan, or other document that is approved by DOE for Financial Assistance (whether such Financial Assistance represents all or only a portion of the support necessary to carry out those activities).

**“Proposal”** is the term used in IIPS meaning the documentation submitted in response to a solicitation. Also see Application.

**“Pure Edge Viewer”** is a small, free program which allows you to access, complete and submit applications electronically and securely through Grants.gov. You will not be able to access, complete, or submit an application through Grants.gov, unless the Pure Edge Viewer is downloaded on your computer. <http://www.grants.gov/DownloadViewer>.

**“Recipient”** means the organization, individual, or other entity that receives a Financial Assistance Award from DOE, is financially accountable for the use of any DOE funds or property provided for the performance of the Project, and is legally responsible for carrying out the terms and condition of the award.

**"Selection"** means the determination by the DOE Selection Official that negotiations take place for certain Projects with the intent of awarding a Financial Assistance instrument.

**"Selection Official"** means the DOE official designated to select Applications for negotiation toward Award under a subject solicitation.

**"Substantial Involvement"** means involvement on the part of the Government. DOE's involvement may include shared responsibility for the performance of the Project; providing technical assistance or guidance which the Applicant is to follow; and the right to intervene in the conduct or performance of the Project. Such involvement will be negotiated with each Applicant prior to signing any agreement.

**"Total Project Cost"** means all the funds to complete the effort proposed by the Applicant, including DOE funds (including direct funding of any FFRDC) plus all other funds that will be committed by the Applicant as Cost Sharing.

## APPENDIX B – GRANTS.GOV

In addition to the links provided in the Announcement, we are providing Appendix B to assist you in the registration process. **Please read through the information below prior to starting the registration process. This information will assist you in making the registration process as seamless as possible. It is important to follow the steps in the order outlined below, allowing the time specified between each of the steps.**

**Request a DUNS Number** - Follow the instructions at <http://www.grants.gov/RequestaDUNS>. It is highly recommended that the DUNS number be requested by telephone at 1-866-705-5711, which will take about 10 minutes. There is no charge. *Once the telephone registration is completed, you must allow 24 hours before attempting to use the DUNS number in the next step of registering with the Central Contractor Registry (CCR).*

**Register with the Central Contractor Registry (CCR)** - Go to <http://www.grants.gov/CCRRegister> and click on the “Help” button to locate the tutorial. Print the tutorial for reference and follow the instructions in the link above. We also recommend that you print and complete the 7-page CCR Worksheet at <http://www.ccr.gov/CCRRegTemplate.pdf> prior to registration, as it may take up to 3 days to gather the information needed for the worksheet. You are required to designate an Electronic Business Point of Contact (E-Business POC) and a Marketing Partner Identification Number (MPIN) in the CCR. It is important to provide the MPIN to the E-Business POC. For assistance with the CCR, contact the Assistance Center at 1-888-227-2423 or at [CCR@dlis.dla.mil](mailto:CCR@dlis.dla.mil). You may also access the CCR Handbook at <http://www.ccr.gov/handbook.cfm>.

**Install the PureEdge Viewer** – *Authorized Organization Representatives (AORs) are the individuals that will be given the authority to submit applications on behalf of their organization.* All AORs must download and install the PureEdge Viewer on their computer by following the instructions at <http://www.grants.gov/DownloadViewer>. This small, free program will allow AORs to access, complete, and submit applications electronically and securely. If you encounter any problems, contact customer Support at 1-800-518-4726 or [support@grants.gov](mailto:support@grants.gov). (This step may be done earlier in the process).

**Register with the Credential Provider** - AORs must register with the Credential Provider. *AORs must wait a minimum of 3 business days for the CCR to become active before attempting to register with the credential provider.* Go to <http://www.grants.gov/CredentialProvider> and click on the “Help” button to locate the tutorial. Print the tutorial for reference and follow the instructions in the link above. Record the user ID and password that you enter because you will need this information to register with Grants.gov as an AOR. *AORs must wait approximately 20 minutes after completing the Credential Provider registration before going to the next step of registering with Grants.gov.* If you encounter any problems, the Credential Provider may be reached at 800-386-6820 or via email at [eauthhelp@orc.com](mailto:eauthhelp@orc.com) or [pkihelp@orc.com](mailto:pkihelp@orc.com).

**Register with Grants.gov** - AORs must register with Grants.gov, utilizing the User ID and password obtained from registering with the Credential Provider. Go to <https://apply.grants.gov/GrantsgovRegister#> and click on the “Help” button to locate the tutorial. Print the tutorial for reference and follow the instructions in the link above. After you have

completed the Grants.gov registration process, you will receive a confirmation that indicates whether your registration was successful.

After AORs successfully register with Grants.gov, an email will be generated to the E-Business Point of Contact (POC) that was designated in the CCR, informing them that an individual from their organization has registered in Grants.gov to be an AOR, capable of submitting applications in Grants.gov on behalf of their organization. (Further Information regarding the Electronic Business POC is provided below.) AORs will not be able to submit an application until they receive authorization from the E-Business POC. ***If the AOR does not receive an email authorization from the E-Business POC within 1 business day, contact the E-Business POC.*** If you encounter any problems, contact customer Support at 1-800-518-4726 or [support@grants.gov](mailto:support@grants.gov)

**Designate Privileges to the AOR** - The Electronic Business POC is the sole authority of the organization with the capability of designating, or revoking, an individual's ability to submit grant applications on behalf of their organization through Grants.gov. Once the E-Business POC receives the email notification from the individual wishing to be recognized as an AOR, the E-Business POC should go to <https://apply.grants.gov/AorMgrGetID>, click on the "Help" button to locate the tutorial, print the tutorial for reference, then log on utilizing the DUNS Number and the Marketing Partner Identification Number (MPIN) that was designated by their organization when registering in the CCR and follow the instructions for designating privileges to the AOR. If you cannot locate the MPIN, contact the CCR Assistance Center at 1-888-227-2423 or at [CCR@dlis.dla.mil](mailto:CCR@dlis.dla.mil).

**Submit Application in Grants.gov** - Once the E-Business POC has authorized privileges to the AOR, the AOR will receive an email notification that they have been given authorization. The AOR may then proceed to submit an application in Grants.gov (see the "Install the PureEdge Viewer" step above). For application instructions, go to <http://www.grants.gov/Apply>. The training demonstration at <http://www.grants.gov/CompleteApplication> will assist AORs in the application process.

Remember that you must open and complete the Application For Federal Assistance (SF-424) first, as this form will automatically populate data fields in other forms. If you encounter any problems, contact customer Support at 1-800-518-4726 or at [support@grants.gov](mailto:support@grants.gov) If you forget your user name or password, follow the instructions provided in the Credential Provider tutorial.

**NOTE: Tutorials may be printed by right-clicking on the tutorial and selecting "print".** In addition to the tutorials, the User Guide is a valuable resource. The User Guide is found at [http://www.grants.gov/GrantsGov\\_UST\\_Grantee/SSL/WebHelp/userguide.doc](http://www.grants.gov/GrantsGov_UST_Grantee/SSL/WebHelp/userguide.doc).



## APPENDIX C – REFERENCE CHECKS ON FEDERAL AWARDS

Applicants shall provide the information requested in the table below for federal awards that were received by either the organization or principal investigator, from any agency, for technologies relevant to this Funding Opportunity Announcement and with award values in excess of \$1,000,000. Below is a sample format which may be used for this purpose. Please do not provide information for more than ten awards.

Sample Format						
(Complete items 1-6 below for each federal award. Duplicate this table on supplementary sheets as necessary)						
(1) AWARD TITLE	(2) INSTRUMENT NO.	(3) Total Award Value (\$)	(4) PERIOD OF PERFORMANCE FROM: THRU:		(5) APPLICANT'S PROJECT DIRECTOR (Name, address, zip code, area code and telephone no.)	(6) FEDERAL AGENCY MAKING AWARD ( Agency name, Federal Program Manager. address, zip code, telephone.)
					( ) -	( ) -
					( ) -	( ) -
					( ) -	( ) -
					( ) -	( ) -
					( ) -	( ) -